

Martin O'Malley, Governor Anthony G. Brown, Lt. Governor

Beverley K. Swaim-Staley, Secretary Neil J. Pedersen, Administrator

## Maryland Department of Transportation

June 29, 2010

## **MEMORANDUM**

TO:

Mr. Kirk McClelland

Director, Office of Highway Development

FROM:

Dennis German,

Chief, Community Design Divisi

PROJECT: MD 24 (Rocks Road) Slope Repair Project Priority Sections

RE:

Advisory Committee Meeting Minutes

The third Advisory Committee Meeting for the MD 24 project was held on May 19, 2010 at the McFaul Activities Center, Room 4, 525 West MacPhail Road, Bel Air, Maryland. The following people were in attendance:

Mr. Greg Golden	Maryland Department of Natural Resources (DNF	()

Environmental Review Unit

Mr. Daryl Anthony DNR – Maryland Park Service

Mr. David Malkowski Maryland State Highway Administration (SHA) –

District 4

Mr. Terry Maxwell

Mr. Cornelius Barmer

Mr. Dennis German

Mr. Kirk McClelland

Ms. Jialin Tian

SHA – Office of Environmental Design

SHA – Office of Highway Development

SHA – Office of Highway Development

SHA – Office of Highway Development

Ms. Donna Buscemi SHA – Office of Planning and Preliminary Engineering

Councilmember Chad Shrodes Harford County Council

Councilmember Mary Ann Lisanti Harford County Council and Executive Director Lower

Susquehanna Heritage Greenway

Senator Barry Glassman Maryland State Senate

Delegate Wayne Norman Maryland House of Delegates

Mr. Steve Hurt McCormick & Taylor, Inc -Maryland Department of the

Environment (MDE) - Nontidal Wetlands and

Waterways Division

Ms. Marsha Kaiser Parson Brinckerhoff and Lower Susquehanna Heritage

Greenway Consultant

My telephone number/toll-free number is\_

Maryland Relay Service for Impaired Hearing or Speech: 1.800.735.2258 Statewide Toll Free

MD 24 (Rocks Road) Advisory Committee Meeting Page 2

Mr. Eric Cook
Mr. Jack Dettmer
Mr. Todd Holden
Mr. Robert Taylor
Mr. Vince Minichiello
Rocks Area Resident

Mr. Ben Lloyd Rocks Area Advisory Committee

Ms. Deborah Bowers Rocks Area Advisory Committee— Save the Rocks Ms. Debbie Coomes Rocks Area Advisory Committee — Save the Rocks

Mr. Brian Goodman Rocks Area Resident – Save the Rocks

Ms. Rachel Konopacki
Mr. Joseph DaVia
US Army Corps of Engineers
Mr. Jack Dinne
US Army Corps of Engineers
US Army Corps of Engineers
US Army Corps of Engineers

Ms. Susan Frey US Fish and Wildlife

Mr. Dave Malkowski made the opening remarks by welcoming everyone to the third MD 24 Advisory Committee meeting. The purpose of this meeting was to brainstorm possible solutions for the slope stabilization and surface drainage improvement.

Attendees were divided into three groups. Each group consisted of at least one member of Save The Rocks, a federal/state environmental agency representative(s), a local resident(s), a local elected official(s), and State Highway Administration (SHA) staff(s). Ms. Marsha Kaiser, from Parsons Brinckerhoff, provided ground rules for group discussion. During the work session, groups were asked to review the reference materials and think about possible solutions which fulfilled the primary objectives discussed at the first Advisory Committee Meeting in February 2010. After the breakout sessions, the group leaders would give a brief report summarizing the group's discussions.

Mr. Brian Goodman, leader of Group Two, was first selected to give a report. Mr. Goodman expressed his group's preference to focus the improvements along the creek side and avoiding disturbance to the exposed rocks adjacent to MD24. The design principles of Group Two were "Go Natural" and to minimize/avoid any construction using concrete. A combination of different techniques should be utilized for steam stabilization. Wherever there is space available along the bank, root wad revetment could be considered; however, at narrow spots, imbricated walls seemed to be a viable solution. Mr. Goodman brought a picture of stone retaining walls along the east side of Deer Creek and suggested the proposed imbricated wall should imitate these existing walls system. To provide a better access to the stream for fishermen or other creek recreational users, Group Two also suggested considering to spread out the stacked stones for steps wherever possible. As one of the core members of Save The Rocks (STR) group, Mr. Goodman said the STR group treated this project as a corridor project, not only just two sections.

To address the roadway drainage, either drainage system, open channel system or closed system, has its pro and cons. An open channel system could provide a more natural look but require greater disturbances. The closed system may be a better fit in the limited space; however, the concrete curb did not integrate well into the surrounding natural features. Group Two suggested examining the possibility of installing an inroad grate system in the narrow spots to minimize impacts of any rock outcropping on the west side of MD 24 (Rocks Road). If any rock outcropping is disturbed to install the ditch system, a trough cut should also be investigated along the west road side – undercutting the rock to leave an overhang in place.

MD 24 (Rocks Road) Advisory Committee Meeting Page 3

In order to provide space to install the surface drainage facilities, Group Two would rather slightly shift the roadway towards to Deer Creek.

The next report was presented by Ms. Deborah Bowers, a member of STR and leader of Group Three. This group stated that the more critical areas of Sections A and G need to be targeted for slope stabilization techniques identified in previous meetings. Group Three favored using natural looking materials and opposed the option of placing riprap to stabilize the eroded slope. Ms. Bowers said the selected solution should also enhance access to the stream.

Group Three approached two alternatives to address the slope erosion in Section A from Station 110+00 to Station 115+00. Alternative one divided this critical area into two portions: From Station 110+00 to Station 112+00, the group would like to see imbricated stone wall which minimized impacts to Deer Creek and provide a consistent appearance in harmony with existing environmental features. From Station 112+00 to Station 115+00, the group suggested using root wad revetment where more room is available on the embankment. Alternative Two would utilize the method of floodplain adjustment. The floodplain adjustment could limit the rock removal and protect the fishing habitat and trees on the bank.

The group felt the erosion areas where they are currently identified in Section G were too general. Ms. Bowers stated that the work should be only applied in the problematic areas where the cracking pavement appeared. She suggested breaking up the entire section and prioritizing the need of repair. Floodplain adjustment techniques could be considered in Section G. Turf matting could be placed at those low stress locations along the embankment. With the concerns of impact to adjacent private properties, Ms. Bowers suggested investigating a no build option in this section. The group identified the existing retaining wall located from Station 229+00 to Station 230+00 as needing some repairs.

Group Three also noted concerns regarding the parking lot at the south end of Section A. The existing parking lot is lower than the roadway and floods more easily after a rain event. Group Three suggested that SHA and its partners examine options for improving the parking lot drainage. Ms. Bowers emphasized she disagreed there was a surface drainage issue in either section. She said SHA needs first to better maintain the existing pipes or inlets before placing additional drainage systems along roadway.

Ms. Debbi Coomes, speaker of Group One, then shared their group discussion with the Committee. Group One strongly suggested that a Hydrology and Hydraulic (H/H) study be completed. An H/H study would help identify the source of slope failing, either from creek erosion or surface water and its possible solutions. Riprap or gabions was not a preferable option because of their engineering appearance. Gabions act like time release capsules: the wire mesh could corrode and eventually fail. Ms. Coomes said her group were in favor of the root wad revetment and imbricated wall technique and would like to have further investigation of those alternatives. Root wads will not only provide a natural appearance but also improve the water habitat in Deer Creek. Imbricated wall techniques could be used at the narrow spots. Considering enhancement of pedestrian access to the stream, the imbricated stone could be tailored in a way and formed as steps. Turf matting could be applied higher up on the slope between the top of the wall and the road edge. Ms. Coomes expressed her group's concern that the imbricated wall would need a strong foundation which might not be possible in some locations. An H/H study and soil borings would help to identify the weak

MD 24 (Rocks Road) Advisory Committee Meeting Page 4

foundation locations; and depending on the results, additional in-stream techniques might be practical to this project. Mr. DaVia the US Army Corps of Engineers (USACE) stated the J-Hook Vane and Cross-Vane structures might be possible solutions to reduce the bank erosion. Both in-stream structures are to concentrate the flow in the middle of the stream, thus narrowing the flow path. As a result, they remove stress from the banks and help to prevent erosion. The group also suggested studying the option of sliding the roadway alignment away from Deer Creek along with the no-build option.

Group One also suggested SHA consider placing grated inlets in roadway where there is a drainage problem. Another option Ms. Coomes group discussed was to adjust the roadway crowning to improve the drainage. The typical roadway crowns the center thus the water drains towards both edges. If practical, the roadway can be tilted and the surface water will be directed to the lower side. The proposed width of the roadway should be kept as is, and no bicycle lane should be included in the proposed design. At last, Ms. Coomes emphasized Councilman Chad Shrodes' quote, one of the members in her group: "The goal of this project is to utilize a combination of techniques that have the least impact on the natural environment and are pleasing aesthetically, while accomplishing the project's erosion and drainage issues, as well as road safety for pedestrians and park patrons."

The SHA agreed to perform a preliminary engineering assessment of the proposed alternatives for review at the next meeting.

The above comments reflect my understanding of the topics, discussions, and decisions reached at this meeting. If you have any questions, comments, or corrections regarding this meeting or these minutes, please contact Mr. Dennis L. German, Chief, Community Design Division, SHA at 410-545-8900, toll free 888-228-5003, or via email at <a href="mailto:dgerman@sha.state.md.us">dgerman@sha.state.md.us</a> within fourteen (14) days of this date.

cc: Attendees